



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200
Fax 613 632-5246

649.5010
Job Sheet 186020



Part No: 649.5010

Part Name: Deflector



Part Weight: 0 lbs

Job Created: 11/8/18

Due Date: 11/29/18

Type: SOLD

Note: DWG REV D IPP REV C RQ 13/10/8 VERIFIED BY:JLM

Ship Via:

Job Qty: 4 ea

DAS
21
9-89

Status: New

Priority: Medium

Job Tracking No:

Created By: Marie Lajeunesse

Description:

Bill of Materials

Job Routing

Op No	Operation	Qty	Start Date	Due Date	Standard		Workcenter/Supplier		Sign-off
					Setup Hrs	Run Hrs	Workcenter / Supplier	Lead Time	
90	Start up Operation	4 Ea	11/29/18	11/29/18	0.00	0.00	Start Up Machining-1		DTP 18-11-22
100	Bandsaw	4 pcs	11/29/18	11/29/18	0.00	0.40	Bandsaw1		DTP 18-11-22
110	CNC Vertical Machining	4 pcs	11/29/18	11/29/18	0.00	6.67	HAAS1-1		DTP 18-11-22
120	QC	4 pcs	11/29/18	11/29/18	0.00	0.00	QC2 Machining-1		DTP 18-11-22
130	QC	4 pcs	11/29/18	11/29/18	0.00	0.00	QC8 Machining-1		DTP 18-11-22
140	Outsource	4 pcs	11/29/18	11/29/18			ATG001-VC	8	DTP 18-11-22
150	Packaging	4 pcs	11/29/18	11/29/18	0.00	0.00	Packaging2		DTP 18-11-22
160	QC	4 pcs	11/29/18	11/29/18	0.00	0.00	QC5		DTP 18-11-22
180	Packaging	4 pcs	11/29/18	11/29/18	0.00	0.00	Packaging3-1		DTP 18-11-22
190	QC21-SA	4 Ea	11/29/18	11/29/18	0.00	0.00	QC21		DTP 18-11-22

Part Op 100 - Cut Blanks at 40.00"

Descriptions: 110 - 1-Machine per folio FB215 DWG REV: C FOLIO REV: C 2- deburr and break all sharp edges

120 - QC2- Inspect parts off machine FAI/FAIB

130 - QC8- Inspect parts - second check

140 - Issue P/O to ATG: 80041851 HARD ANODIZE COLOR BLACK, AND PRIME AS PER DWG 649.5000 REV. D

150 - Receive & Inspect for Damage & Mat'l Certs

160 - QC5- Inspect part completeness to step on W/O

180 - Identify as per dwg & Stock Location: ***IDENTIFY AS PER APICAL MPP-120 BY STAMPING P# AND REV***

190 - QC21- Final Inspection - Work Order Release

Job BOM

Part / Item	Component Name	Quantity	Operation	Container
649.5010E	Deflector	13.1264 Ea (3.2816 ea)	90-Start up Operation	B150634
		3.3333ft	45 18-11-22	

Job Allocations

Operation	Component Part	Required	Inventory	Allocated
90-Start up Operation	649.5010E	13	18	0

Part Specifications

Specifications could not be found.

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE



QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____ Date : _____	DISPOSITION Rework ☐ Scrap ☐	Skid-tube ☐ Machining ☐ Part: 649.5010 Job No: 186020 Serial No/Batch: S130807 Date: 11/22/18	AGAINST DEPARTMENT/PROCESS Cross tube ☐ Small Fab ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐	 Container No: S130807 Dart Aerospace Ltd. 1270 Aberdeen Street Hawkesbury, ON K6A 1K7 CANADA TEL: 1 813 832-5200 Email: sales@dartaero.com www.dartaerospace.com	MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval
Root Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Setup ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐	Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐
OTHER : _____					

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NOTES: UNLESS OTHERWISE SPECIFIED

- 1 MATERIAL: ALUMINUM 7075-T651 PER AMS-QQ-A-250/12.
- 2 FINISH: HARD ANODIZE IAW MIL-A-8625 TYPE III, CLASS 2, COLOR BLACK; PRETREAT PRC-DESOTO PR-148 ADHESION PROMOTER; PRIME IAW MIL-P-23377J TYPE I CLASS N; 1-2 MIL MAX.
3. DE BURR AND BREAK ALL SHARP EDGES.
4. IDENTIFY IAW MPP-120. LASER ETCH P/N AND REVISION, 12 PT. CENTURY GOTHIC.
5. ALL DIMENSIONS SHOWN PRIOR TO FINISH.
- 6 PART DIMENSIONS CONTROLLED BY CAD MODEL FILE: 649.5010 DEFLECTOR.SLDPRG, LAST MODIFIED 04-16-12.
- 7 PART DIMENSIONS CONTROLLED BY CAD MODEL FILE: 649.5012 DEFLECTOR.SLDPRG, LAST MODIFIED 11-03-11.
- 8 PART DIMENSIONS CONTROLLED BY CAD MODEL FILE: 649.5013 DEFLECTOR.SLDPRG, LAST MODIFIED 04-16-12.

UNINCORPORATED ECN(s)

03693

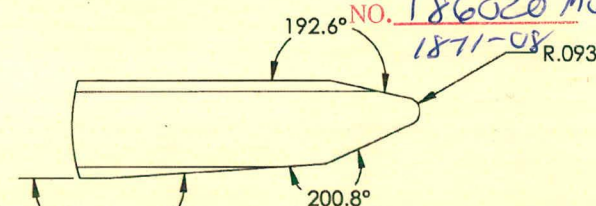
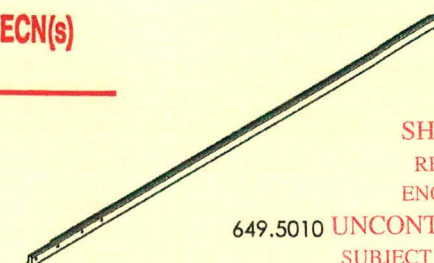
REV	DESCRIPTION	DATE	APPROVED
	LAST PROTOTYPE REVISION: P02		N/A
N/C	INITIAL RELEASE	11-03-11	P. BRAVO
A	INCORPORATED ECN 03422 AND 03478	04-16-12	P. BRAVO
B	INCORPORATED ECN 03504	05-02-12	P. BRAVO
C	INCORPORATED ECN 03521	05-22-12	P. BRAVO

SHOP COPY
RETURN TO
ENGINEERING

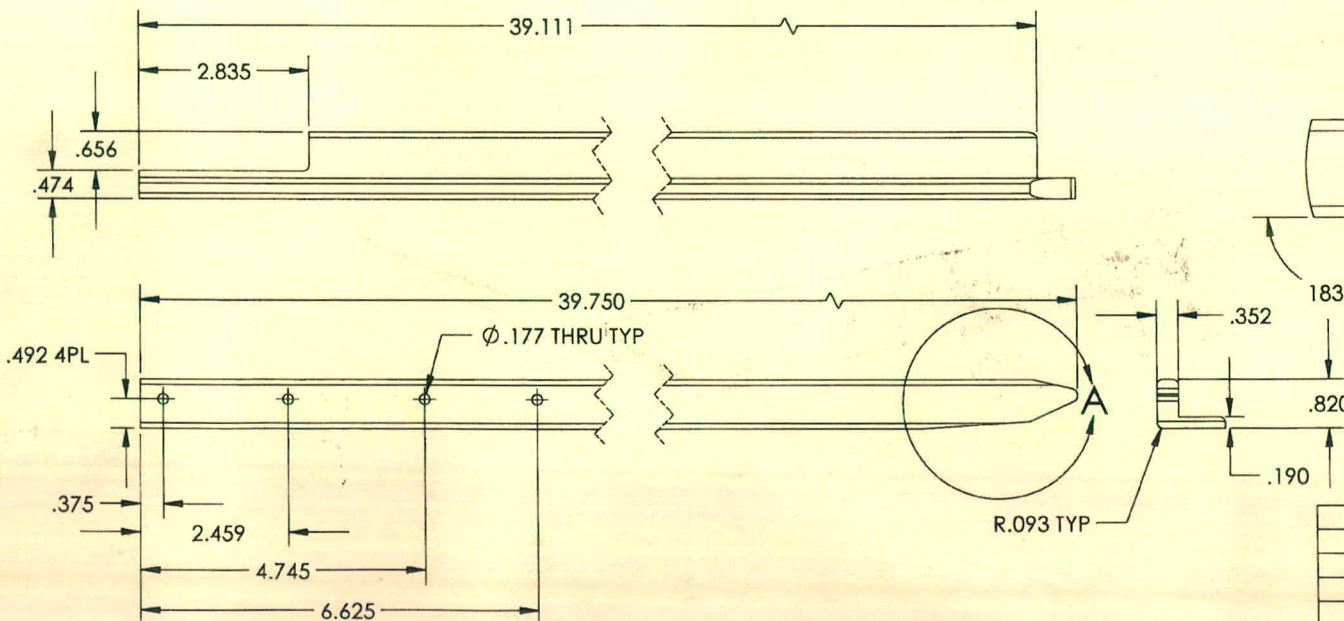
649.5010 UNCONTROLLED COPY
SUBJECT TO AMENDMENT

WITHOUT NOTICE
WORK ORDER

NO. 186020 MW
1871-08



DETAIL A
SCALE 1:1



4	649.5013	DEFLECTOR	△	△△
3	649.5012	DEFLECTOR	△	△△
2	649.5011	DEFLECTOR	△	△
1	649.5010	DEFLECTOR	△	△△
FIND #	PART #	DESCRIPTION	MAT'L	SPEC.
QTY	PARTS LIST			
NEXT ASSY (S)		ORIGINAL DATE 11-03-11	APICAL INDUSTRIES 2608 TEMPLE HEIGHTS DR. OCEANSIDE, CA. 92056-3512 (760)724-5300 DEFLECTOR	
649.4700		DRAWN BY A. QUAN		
		CHECKED BY P. BRAVO		
		DRAWING APPROVAL P. BRAVO 11-03-11		
		CONTRACT NO.		
		UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: 2 PLACE DECIMALS ± .03 3 PLACE DECIMALS ± .010 ANGLES ± .5°	SIZE: CAGE CODE B 07M26 DWG. NO. 649.5000 SCALE: NONE	REV. C SHEET 1 OF 4

Linda Lacelle

From: Linda Lacelle
Sent: Wednesday, November 7, 2018 11:21 AM
To: Patrick Duval; Caitlin Crooks
Cc: Jason Leroux; Jean-Luc Menard; Marc Bellavance
Subject: RE: 649.4701- rev C
Attachments: 649.4900 A1 CUTTER ASSY.pdf

Thx Pat
Pls see below

From: Patrick Duval
Sent: Tuesday, November 6, 2018 5:43 PM
To: Caitlin Crooks <ccrooks@dartaero.com>; Linda Lacelle <llacelle@dartaero.com>
Cc: Jason Leroux <jleroux@dartaero.com>; Jean-Luc Menard <jmenard@dartaero.com>; Marc Bellavance <mbellavance@dartaero.com>
Subject: RE: 649.4701- rev C

Linda,
Here's a quick list of what I will need in order to make my kit to rev C.

649.5111 need some at rev A1 (got some in quarantine) – are these good to use?
649.5112 need some at rev A1 (got some in quarantine) – are these good to use?
649.4811 need some at rev A – WJ>OS – approx. 3wks
649.4816 need some at rev A – WJ>OS – approx. 3wks
649.4813 need some at rev A – WJ>OS – approx. 3wks
649.5214 need some at rev A – Machining>OS- approx. 4-5wks aro
649.5010 need some at rev C1 – Machining>OS- approx. 4-5wks aro
649.4902 need some at rev A – do the 649.5301 and 649.8301 need to be at an older rev? see attached

x 4 each

Rev A1

Also for me to complete the kit from RA173 we will need to add, remove some of the hardware to make it as per rev C.

Sorry for the delay... this is a big mess and I don't what to rush and ship something that's not good.

Pat Duval
QC Coordinator

Linda Lacelle

From: Marc Bellavance
Sent: Friday, November 9, 2018 8:41 AM
To: Linda Lacelle
Cc: David Duval; Jesse White; Marie Lajeunesse; Jason Leroux; Sian Willems; Patrick Duval; Caitlin Crooks; Steven Drouin
Subject: RE: 649.4701- rev C

Hey Linda,

I'm not sure why the 119 CCK is still under review... Went through all the ECNs with Muffin yesterday and could not find one stating "remove from under review".

As far as I remember, there were some sourcing issues with the NAS inserts – P/Ns, equivalences, lead times, you name it – and this had a huge impact on the release of the II and ICA.

So...

Looking at the list of manufacturing and supporting documents, all have been released.

We have the adequate warnings in place for Sales (S/N 14941 and subsequent, ship from the shelf. S/N 14940 and earlier requires Kit built to Rev. C (up until we have a kit P/N from Eng Vista that is compatible with earlier A119 S/Ns)).

Unless we're still having sourcing issues then I think that 649.4701 should be removed from under review...

Marc

From: Linda Lacelle
Sent: November 9, 2018 7:17 AM
To: Marc Bellavance <mbellavance@dartaero.com>
Cc: David Duval <dduval@dartaero.com>; Jesse White <jwhite@dartaero.com>; Marie Lajeunesse <mlajeunesse@dartaero.com>; Jason Leroux <jleroux@dartaero.com>; Sian Willems <swillems@dartaero.com>; Patrick Duval <pduval@dartaero.com>; Caitlin Crooks <ccrooks@dartaero.com>; Steven Drouin <sdrouin@dartaero.com>
Subject: RE: 649.4701- rev C
Importance: High

Marc,

Muffin tells me this is still U/R – is it or isn't it?? I need to get these w/o's out on the floor asap

Thx

L

From: Linda Lacelle

Sent: Friday, November 2, 2018 11:28 AM

To: Caitlin Crooks <ccrooks@dartaero.com>; Patrick Duval <pduval@dartaero.com>

Cc: David Duval <dduval@dartaero.com>; Jesse White <jwhite@dartaero.com>; Marie Lajeunesse <mlajeunesse@dartaero.com>; Jason Leroux <jleroux@dartaero.com>; Sian Willems <swillems@dartaero.com>; Marc Bellavance <mbellavance@dartaero.com>

Subject: RE: 649.4701- rev C

Understood...Pat, we will require a response **TODAY** plz...

From: Caitlin Crooks

Sent: Friday, November 2, 2018 8:12 AM

To: Linda Lacelle <llacelle@dartaero.com>; Marc Bellavance <mbellavance@dartaero.com>; Sian Willems <swillems@dartaero.com>

Cc: Patrick Duval <pduval@dartaero.com>; David Duval <dduval@dartaero.com>; Jesse White <jwhite@dartaero.com>; Marie Lajeunesse <mlajeunesse@dartaero.com>; Jason Leroux <jleroux@dartaero.com>

Subject: RE: 649.4701- rev C

Hi Linda

Marc elaborated a bit last night for the reason behind the revs.

Agusta "older style" A/C used to have rivnuts where the CCK installed, so our older style CCK works with that configuration. Then Agusta changed the design to screws, and we updated our CCK to fit with the newer configuration

All A/C's at S/N 14940 and earlier are the older style rivnut and all A/C's S/N 14941 and subsequent are the newer style.

In my case, my customer has the older A/C so this is why we have asked for the older style CCK

Caitlin

From: Linda Lacelle

Sent: Thursday, November 01, 2018 4:47 PM

To: Caitlin Crooks <ccrooks@dartaero.com>; Marc Bellavance <mbellavance@dartaero.com>; Sian Willems <swillems@dartaero.com>

Cc: Patrick Duval <pduval@dartaero.com>; David Duval <dduval@dartaero.com>; Jesse White <jwhite@dartaero.com>; Marie Lajeunesse

<mlajeunesse@dartaero.com>; Jason Leroux <jleroux@dartaero.com>

Subject: Re: 649.4701- rev C

Just don't understand why it would still be available at an old revision??

Sent from my iPhone

On Nov 1, 2018, at 4:13 PM, Caitlin Crooks <ccrooks@dartaero.com> wrote:

Hi Pat

I would like just like to mention that I currently have an order for this cable cutter kit.

If the internal warning & information provided by customer support is incorrect, that's a whole different story, but please keep in mind there is a customer actively waiting on this.

Is there anything I can help with the expedite this?

Caitlin

From: Patrick Duval

Sent: Thursday, November 01, 2018 3:51 PM

To: Linda Lacelle <llacelle@dartaero.com>; Caitlin Crooks <ccrooks@dartaero.com>

Cc: David Duval <dduval@dartaero.com>; Jesse White <jwhite@dartaero.com>; Marie Lajeunesse <mlajeunesse@dartaero.com>; Jason Leroux <jleroux@dartaero.com>

Subject: RE: 649.4701- rev C

Caitlin,

I'm still looking into this one...

Yes I do have one kit in my office from RA173 but its incomplete, also if you need a previous rev I will need a sign off by engineering, and that only if we are able to manufacture the old part.

I will get back to you as some as possible

Pat Duval

QC Coordinator

DART AEROSPACE

T: 1-613-632-5200 ext.228

www.dartaero.com
pduval@dartaero.com
<image003.jpg>

From: Linda Lacelle
Sent: Thursday, November 01, 2018 1:51 PM
To: Caitlin Crooks <ccrooks@dartaero.com>; Patrick Duval <pduval@dartaero.com>
Cc: David Duval <dduval@dartaero.com>; Jesse White <jwhite@dartaero.com>; Marie Lajeunesse <mlajeunesse@dartaero.com>; Jason Leroux <jleroux@dartaero.com>
Subject: RE: 649.4701- rev C

Pat was going to look at it this afternoon- Pat?

From: Caitlin Crooks
Sent: Thursday, November 1, 2018 1:49 PM
To: Linda Lacelle <llacelle@dartaero.com>; Patrick Duval <pduval@dartaero.com>
Cc: David Duval <dduval@dartaero.com>; Jesse White <jwhite@dartaero.com>; Marie Lajeunesse <mlajeunesse@dartaero.com>; Jason Leroux <jleroux@dartaero.com>
Subject: RE: 649.4701- rev C

Any luck on this one?

From: Linda Lacelle
Sent: Wednesday, October 31, 2018 10:37 AM
To: Caitlin Crooks <ccrooks@dartaero.com>; Patrick Duval <pduval@dartaero.com>
Cc: David Duval <dduval@dartaero.com>; Jesse White <jwhite@dartaero.com>; Marie Lajeunesse <mlajeunesse@dartaero.com>; Jason Leroux <jleroux@dartaero.com>
Subject: RE: 649.4701- rev C

Seems we have an old kit in qrtn...Pat, is this kit the old version and can we sell it ?

<image004.png>

From: Caitlin Crooks

Sent: Wednesday, October 31, 2018 10:33 AM

To: Marie Lajeunesse <mlajeunesse@dartaero.com>; Jason Leroux <jleroux@dartaero.com>; Jesse White <jwhite@dartaero.com>; Linda Lacelle <llacelle@dartaero.com>

Cc: David Duval <dduval@dartaero.com>

Subject: 649.4701- rev C

Lead time please

649.4701 X 1 – REV C. (older style)

If there are any questions, do not hesitate to ask.

Thank you,
Caitlin

CAITLIN CROOKS

Inside Sales Representative

DART AEROSPACE

T 1 613 632-3336 > 289

F 1 613 632-4443

M 1 613 306-0596

E ccrooks@dartaero.com

1 800 556- 4166

www.dartaerospace.com

<image005.jpg>



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

PURCHASE ORDER **PO041851**

Supplier: ATG001-VC
A.T.G. Industries Inc
731 INDUSTRIELLE ROAD
ROCKLAND
ON
K4K 1T2 Canada
Phone: 613-446-4544
Fax: 613-446-4556

PO No: PO041851
PO Date: 11/26/18
Due Date: 12/11/18
Purchase Order
Revision:
Revision Date:
Ship-To Contact: Tsimiklis, Chrisoula
Phone:

Attention: Lalande, Marc-Andre

Via: Ground
Pymt Terms: Net 30

Ship To: 1270 Aberdeen Street
Hawkesbury
ON
K6A 1K7 Canada
Phone: 613-632-5200

Freight Terms:
Special Comments: ** Please confirm dates as per line ** :)

Items												
Line Item	Job	Part	Description	Status	Account	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (CAD)	Extended Price	
1	185269	RBW109-3130-70-101-7	Base -Issue P/O to ATG; PO -ANODIZE COLOR CLEAR, PER IAW MIL-A-8625F TYPE 2 CLASS 1, Water sealant -Certificate of Conformity is required	Firmed	-	12/4/18	4 pcs	0 pcs	4 pcs	\$11.00/pcs	\$44.00	
4X NOV 27 2018												
Line Item Note ** ASAP **												
2	185760	646.3210	Support Issue P/O to ATG : 1- Hard Anodize Color Black and Prime as per Dwg 646.3200	Firmed	-	12/4/18	10 pcs	0 pcs	10 pcs	\$20.35/pcs	\$203.50	
10X DEC 17 2018												
3	186020	649.5010	Deflector Issue P/O to ATG: HARD ANODIZE COLOR BLACK, AND PRIME AS PER DWG 649.5000 REV. D	Firmed	-	12/11/18	1 pcs	0 pcs	1 pcs	\$40.00/pcs	\$40.00	
1X DEC 19 2018												
	186828			Firmed	-	12/11/18	1 pcs	0 pcs	1 pcs	\$40.00/pcs	\$40.00	
Sub Total:							2	0	2		\$80.00	



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

PURCHASE ORDER **PO041851**

Items											
Line Item	Job	Part	Description	Status	Account	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (CAD)	Extended Price
4	186019	649.5214	Bracket Issue P/O to ATG: AS PER MPP-172 SECTION 2.1, HARD ANODIZE COLOR BLACK, PER IAW MIL-A- 8625 TYPE 3 CLASS 2 AS PER MPP-172 SECTION 4.2, PRIME AS PER IAW MIL-PRF- 23377 TYPE 1 CLASS N	Firmed	-	12/11/18	4 pcs	0 pcs	4 pcs	\$15.00/pcs	\$60.00
						4 X DEC 17 2018					
5	185271	RBW109- 3130-70- 101-5	Barrel -Issue P/O to ATG; PO -ANODIZE COLOR CLEAR, PER IAW MIL-A-8625F TYPE 2 CLASS 1, Water sealant -Certificate of Conformity is required	Firmed	-	12/11/18	5 pcs	0 pcs	5 pcs	\$11.00/pcs	\$55.00
						5 X NOV 27 2018					
Grand Total:											\$442.50

Order Notes

Terms & Condition of Purchasing(Suppliers) and Procurement Quality Clauses are an integral part of our AS9100 requirements. To learn in detail, please visit www.dartaerospace.com for further explanation.

Plex 11/27/18 12:59 PM dart.tsimiklis.chrisoula



A.T.G. Industries Inc.
731 Industrielle Street
Rockland, ON K4K 1T2
Canada

Ph: (613) 446-4544

Fax: (613) 446-4556

Pack List

Number: 916871

Date: 19-Dec-18

To

Dart Aerospace Ltd
1270 Aberdeen St
Hawkesbury, ON K6A 1K7

Ship To

Chrisoula Tsimiklis
Dart Aerospace Ltd
1270 Aberdeen St
Hawkesbury, ON K6A 1K7

Ph: 613 632-9577

Fax: 613 632-1053

Ph: 613 632-9577

Fax: 613 632-1053

Terms		Ship Via	
		ATG Delivery	
Quantity	Description		
	Please reference this document's Pack List number on all correspondences regarding this shipment. If you have any questions, please contact us.		
2 ea	Part: 649.5010 Deflector Hard Black Anodize per MIL-A-8625F, Type III, Class 2, .0005-.0045" (.5 - 4.5mils) Prime per MIL-PRF-23377, Type I, Class N (Customer Supplied) .0001-.0002" (1 - 2 mils) per drawing. Job: 24220	Rev: D	DAS 38 9-89
		PO: PO041851	Line: 3-4
CERTIFICATE OF CONFORMANCE A.T.G Industries Inc. certifies that all items in this shipment conform to the requirements. Date: <u>DEC 19 2018</u> Certified Signature: <u></u> Receiver Signature: _____ A.T.G Industries Inc. is AS9100 Registered and Nadcap Chemical Processing Accredited. Note: This Packing Slip may contain parts that have been PLATED. Items that are plated may be subject to natural tarnishing and it is suggested that they be inspected within 24 hours of receipt.			
Made in Canada.			

